

## THIS MONTH

Being portable, laptops can easily fall into the wrong hands. Whether you leave it in the back of a taxi or someone steals it, NEC's Versa S970 (right) will ensure your sensitive data stays private. Seagate's new Momentus hard disk encrypts all data as it's written. If you don't have the password, you can't see the data.

These days, you can pick up a digital camera for well under £100, but it's hard to know whether it's a bargain. Canon's new PowerShot A720 IS (which is reviewed on page 36) may cost a bit more than £100, but it's one of the best-value compacts we've seen. It has a 6x optical zoom, an eight-megapixel sensor, a 2½in screen and full photographic control, all for £125. The quality of its photos is simply amazing for the money.

We've also put AMD's new quad-core Phenom processor (reviewed on page 50) through its paces, and Sapphire's HD 3870 X2 graphics card (reviewed on page 51) turns out to be the fastest graphics card we've ever tested.

**Jim Martin**  
Deputy Editor

jim@computershopper.co.uk



NEC

Versa S970 M21T0

★★★★★

£686 inc VAT

From NEC 0844 8940 167

NEC's Versa S970 is a laptop that's squarely aimed at business users. Its big advantage over its competitors is its hardware encryption, which keeps data far more secure than the software encryption found on other laptops.

Since laptops are mobile, there's a greater chance of your sensitive data falling into the wrong hands. Thanks to the use of Seagate's new Momentus 5400 FDE.2 hard disk, data stored on the S970 is inaccessible to anyone without the correct password. Encryption keys and passwords are stored and handled within the hardware on the disk, so there's no way a hacker can use malware to copy or view them.

Another benefit of the new Momentus disk is that the encryption doesn't affect the S970's performance as software encryption does. Instead, the Core 2 Duo T7500 and 2GB of RAM are left free to run whatever applications you need.

NEC bundles Embassy Security Center to manage secure Windows passwords, the hard disk passwords for trusted users and any other passwords that you have for applications or websites. These are protected by the hardware TPM 1.2 chip on the S970's motherboard.

All this security means that should your laptop be stolen or lost, your data will remain private. Even if the hard disk were removed and installed in another computer, the encrypted data would still be inaccessible. We tried this, and found that all Windows could see was a 128MB partition with no data on it. During testing, Standby and Sleep modes refused to work and resulted in a blue screen. However, NEC is confident that the bug will be fixed in production models.

It's strange that this version of the S970 doesn't have a fingerprint reader, as this is far

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| Dell XPS M1530                  | ★★★★★   |
| Mesh G92 Pulse Pro              | ★★★★★   |
| NEC Versa S970 M21T0            | ★★★★★   |
| RL Supplies Modula 4300-OC      | ★★★★★   |
| Rock Pegasus 680                | ★★★★★   |
| Samsung R70                     | ★★★★★   |
| VeryPC GreenPC Treeton Standard | ★★★★★   |

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| Archos 405       | ★★★★★   |
| Garmin nuvi 610T | ★★★★★   |
| Palm Treo 500v   | ★★★★★   |
| TomTom Go 720    | ★★★★★   |
| TomTom Go 920T   | ★★★★★   |



| Printers & Scanners                     | page 30 |
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| Canon PIXMA iP2600                      | ★★★★★   |
| Canon PIXMA iP4500                      | ★★★★★   |
| Canon PIXMA MP520                       | ★★★★★   |
| Epson Stylus Photo R360                 | ★★★★★   |
| HP Color LaserJet 3600                  | ★★★★★   |
| Kyocera Ecosys FS-1300D                 | ★★★★★   |
| Lexmark Z1320                           | ★★★★★   |
| Okidata C5750n                          | ★★★★★   |
| Samsung ML-2510                         | ★★★★★   |
| TallyGenicom 8108N Colour Laser Printer | ★★★★★   |

| Displays                | page 34 |
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| BenQ W500               | ★★★★★   |
| Dell Ultrasharp 3008WFP | ★★★★★   |
| Epson EMP-822           | ★★★★★   |
| Hazro HZ30WS            | ★★★★★   |
| LG 37LC55               | ★★★★★   |
| Optoma EP727            | ★★★★★   |
| Panasonic PT-AX200E     | ★★★★★   |
| Toshiba Regza 32C3030   | ★★★★★   |



| Photography                | page 36 |
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| Canon PowerShot A720 IS    | ★★★★★   |
| Canon PowerShot A720 IS    | ★★★★★   |
| Casio Exilim Zoom EX-Z1080 | ★★★★★   |
| Nikon Coolpix P5100        | ★★★★★   |
| Panasonic Lumix DMC-FX33   | ★★★★★   |
| Pentax Optio A30           | ★★★★★   |
| Pentax Optio S10           | ★★★★★   |
| Samsung NV8                | ★★★★★   |
| Sony Cyber-shot DSC-T2     | ★★★★★   |

| Video                                | page 40 |
|--------------------------------------|---------|
| Canon HV20                           | ★★★★★   |
| Canon MD101                          | ★★★★★   |
| Linksys DMA2200                      | ★★★★★   |
| Panasonic HDC-HS9                    | ★★★★★   |
| Terratec Cinergy DT USB XS Diversity | ★★★★★   |
| TopUp TV TUTV Anytime DTR            | ★★★★★   |



# PC SYSTEMS & LAPTOPS

more efficient for entering passwords. There's also a blanking plate above the 14.1in screen where a webcam would go. Both are clear indications of cost-cutting to cover the cost of the hard disk.

As this is a business laptop, it's no surprise to see a CardBus slot rather than the newer ExpressCard variety. The serial port will be a bonus for some, too. The VGA output is another sensible move for hooking the S970 up to projectors in meeting rooms, although the TV-out port is unlikely to be used. It's good to see a DVD writer along with wireless networking and Bluetooth, and there's both wired networking and a 56K modem to cover every situation.

The 1,280x800 resolution widescreen display isn't the best we've seen. It has average brightness and viewing angles, but the matt finish at least means no reflections

from office lights. The keyboard is sensibly laid out and the keys are more than large enough for comfortable typing. Our only criticism is overall build quality. The screen flexes too much for our liking, and the plastic casing around the keyboard is much the same.

Luckily, performance hasn't been sacrificed. The overall benchmark score of 174 is respectable at this price. With 2GB of RAM, you'll be able to run multiple applications without everything grinding to a halt. Battery life is a healthy four hours and 33 minutes, and you can increase this by hitting the ECO button to reduce screen brightness and the processor's speed.

If you're looking for a business notebook to keep your data safe no matter what, this is a fine choice. You pay a premium for the hard disk, but this laptop is still good value.

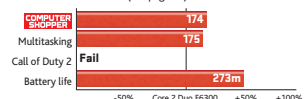
*Jim Martin*

## SUMMARY

- Full hardware encryption
- Good battery life
- Flimsy build

**BUSINESS LAPTOP** Intel Core 2 Duo T7500, 2GB RAM, 120GB disk, Intel GMA X3100 graphics, DVD+RW +DL, 14.1in widescreen LCD, Windows XP Professional, three-year collect-and-return warranty, 2.2kg  
PART CODE NNAJ1700901  
DETAILS [www.nec-online.com](http://www.nec-online.com)

## PERFORMANCE (see page 58)



## FAQ

**Q** I've installed Windows on my Intel Mac using Boot Camp. What's the best way of backing up my Windows partition?

**A** Most backup utilities for the Mac are designed to deal with HFS+ formatted disks. They're not the best choice for backing up a FAT32-formatted Windows partition and won't recognise an NTFS partition without the help of a utility such as Paragon's NTFS for Mac OS X.

You can back up Windows files from within Windows using a utility such as Acronis True Image. Alternatively, you can create a disk image of your Windows partition using a free Mac OS program called WinClone, which is available from [www.twocanoes.com/winclone](http://www.twocanoes.com/winclone). The disk image is treated by the Mac OS like any other file, and can be backed up using a Mac OS backup program such as the free Carbon Copy Cloner, which is available from [www.bombich.com/software/cccl.html](http://www.bombich.com/software/cccl.html).

**Alan Lu**  
PC systems and storage expert



[alan@computershopper.co.uk](mailto:alan@computershopper.co.uk)



## Audio page 42

|                            |       |
|----------------------------|-------|
| Apple iPod Nano            | ★★★★★ |
| Griffin Evolve             | ★★★★★ |
| Hauppauge Xfones           | ★★★★  |
| iRhythms A-211             | ★★★★★ |
| Logitech X-230             | ★★★★★ |
| Philips SHE2550 Extra Bass | ★★★★★ |
| Sandisk Sansa e280         | ★★★★★ |
| Shure SE210                | ★★★★★ |
| Triton AX360               | ★★★★  |

## Networks page 44

|                                                  |       |
|--------------------------------------------------|-------|
| AVM FritzBox Fon WLAN 7140                       | ★★★★  |
| Buffalo WBRM-G125                                | ★★★★★ |
| Hawking Hi-Gain 12dBi Directional Window Antenna | ★★★   |
| Linksys WAG325 Wireless-N ADSL Gateway           | ★★★★★ |
| Sonnet Aria Extreme N                            | ★★★   |

## Storage page 46

|                                           |       |
|-------------------------------------------|-------|
| Cooler Master X Craft 360                 | ★★★★  |
| Enermax Jazz SATA I&II/eSATA              | ★★★★  |
| Hi-Grade Home-serv 2000                   | ★★    |
| LaCie d2 eSATA II 3Gbits Hard Drive 500GB | ★★★★★ |
| LaCie USB Key Max 30GB                    | ★★★★  |
| LG GGW-H20L                               | ★★★★  |
| LG GSA-E50N                               | ★★★★★ |
| Samsung Super-Writemaster SE-S204         | ★★★★★ |
| Western Digital Caviar SE16 500GB         | ★★★★★ |
| Western Digital Passport 160GB            | ★★★★★ |
| Western Digital Scorpio 250GB             | ★★★★★ |

## Components page 50

|                            |       |
|----------------------------|-------|
| AMD Phenom 9600            | ★★★   |
| Asus GeForce 8800GS TOP    | ★★★   |
| Gigabyte GeForce 8800 GT   | ★★★★★ |
| Intel Core 2 Duo E6750     | ★★★★★ |
| MSI K9A2 CF                | ★★★★★ |
| Sapphire Radeon HD 3870 X2 | ★★★★★ |

## Software & Games page 52

|                                                  |       |
|--------------------------------------------------|-------|
| Absolute Entertainment Windows Vista for Dummies | ★★★★★ |
| Adobe Creative Suite 3 Design Premium            | ★★★★★ |
| Adobe Photoshop Lightroom 1.0                    | ★★★★★ |
| Avanquest Fix-It Utilities 8 Professional        | ★★★★★ |
| The Club                                         | ★★★   |
| Conflict: Denied Ops                             | ★★★   |
| GetData Recover My Files                         | ★★★★★ |
| Imperium Romanum                                 | ★★★★  |
| Kaspersky Internet Security 7.0                  | ★★★★★ |
| Magix Mufin MusicFinder base                     | ★★★★★ |
| Roxio Easy Media Creator Suite 10                | ★★★★★ |
| RS Audials Radiotracker 4.0 Platinum             | ★★★★★ |
| StudioLine Photo Classic 3 Plus                  | ★★★   |
| Universe at War: Earth Assault                   | ★★★   |

## BYTE SIZE

### BELKIN 2-in-1 USB Hub

★★★★

£30 inc VAT  
From [www.play.com](http://www.play.com)

You can never have too many USB ports, and this two-in-one hub gives you an extra seven Hi-Speed ports.

The design means that the silver part on top detaches when you need a tiny travel hub to take with you, which is useful if your laptop has only a couple of USB ports. It also has a rotating connector so the hub doesn't block other ports.

When you remove the travel hub you free up the USB port on top, and there are three more on the rear. The front section of the base has a storage area for small items such as USB flash drives.

Even with all these features this hub is pricy. If you can find it cheaper, it's a good choice.

*Jim Martin*

DETAILS: [www.belkin.co.uk](http://www.belkin.co.uk)

### LOC8TOR Loc8tor Lite

★★★

£45 inc VAT  
From [www.loc8tor.co.uk](http://www.loc8tor.co.uk)

The Loc8tor Lite is essentially a hi-tech whistling key-ring. It's a slim black remote control with two locator tags that can each be paired with one of four buttons on the main unit. Once you press a button, a row of coloured LEDs and an increasingly persistent beep indicates how close you are to the tag, which also flashes and beeps.

Some combinations of beeps and flashes aren't clearly defined in the manual. It's supposed to have a line-of-sight range of up to 122m, but around corners the range dropped to under 15m.

The Loc8tor may be helpful if you've lost your keys, but it's overcomplicated, expensive and confusing to use.

*Kat Orphanides*

DETAILS [www.loc8tor.co.uk](http://www.loc8tor.co.uk)

## DELL XPS M1530

★★★★★

£879 inc VAT  
From Dell 0870 152 4699


In last month's *What's New*, we reviewed Dell's XPS M1730 gaming laptop. This month, it's the turn of the M1530. Luckily, it's not as ugly as its larger brother. With the lid closed, it's as sleek as 15.4in laptops get. There's a choice of blue and black lid colours. Our test model had a midnight-blue lid, which changed from purple to blue depending on the viewing angle.

We've no complaints with the rest of the laptop's design. The slot-loading DVD writer is classy, and the rounded screen hinges are reassuringly sturdy. It's a latch-less design, snapping shut like some Sony Vaios.

Open the lid and you're greeted by a large stainless steel palm rest, a good-sized touch pad and a generously proportioned keyboard, which is up to Dell's usual excellent standard. Button clutter is kept to a minimum thanks to a row of touch-sensitive playback and volume controls at the top.

Next to the power button is the MediaDirect

button. This boots the M1530 into a cut-down Windows environment and lets you listen to music, watch DVDs and videos, and access your contacts' details from Outlook. Another neat addition is the WiFi catcher button next to the wireless power switch. When the laptop is off, it lights up if it detects wireless networks and, if the laptop is on, it will display a list of networks.

Other useful extras are the battery status LED indicators, a mini-remote control that's stored in the ExpressCard slot, a secondary headphone output and a pair of decent Creative noise-isolating earphones. A 2-megapixel webcam



is paired with a pair of microphones to eliminate echoes, and a fingerprint reader makes it quick to enter passwords. There's even a good-quality slip case along with a helpful manual in a mock-leather organiser.

VGA and HDMI outputs are welcome, too, should you want to connect to an external monitor. The 1,280x800 widescreen LCD is great quality, but highly reflective. We'd have liked it to be a little brighter to overcome reflections, but this is a minor complaint.

Performance from the Core 2 Duo T7250 was good

and the 160GB hard disk is large enough for most people. We were expecting faster frame rates from the GeForce Go 8600M GT graphics, though. Call of Duty 2 ran at 16fps and this only increased to 25fps when we turned off anti-aliasing and anisotropic filtering. If you drop the resolution or quality settings, most games should be playable.

Some M1530 owners in the US claim the stainless steel top gives static shocks. All UK models ship with an earthed power supply, and during testing we experienced no shocks. Overall, the M1530 is a great laptop, and it's also good value.

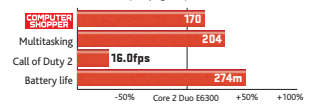
*Jim Martin*

#### SUMMARY

- ✓ Stylish and sturdy
- ✓ Lots of extras
- ✗ Mediocre 3D performance

GENERAL-PURPOSE LAPTOP 2GHz Intel Core 2 Duo T7250, 2GB RAM, 160GB disk, Nvidia GeForce Go 8600M GT graphics, DVD+/-RW +/-DL, 15.4in widescreen LCD, Windows Vista Home Premium, one-year onsite warranty, 2.62kg  
PART CODE NPUK5-NRX5301  
DETAILS [www.dell.co.uk](http://www.dell.co.uk)

#### PERFORMANCE (see page 58)



## Also consider...

### SAMSUNG R70

★★★★★

£660 inc VAT  
From [www.cclonline.com](http://www.cclonline.com)

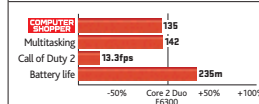

The Samsung R70's chassis may not be a new design, but it's sturdy and attractive. The keyboard is comfortable to type on and the touch pad is small but accurate.

Colours looked bright and rich on the 15.4in widescreen display. You can connect the R70 to a high-definition TV using the HDMI port, and there's plenty of room for your files on the spacious 200GB hard disk.

The R70 isn't the quickest laptop we've seen but it is fast enough for most tasks and it has a generous 2GB of RAM for dealing with memory-intensive tasks such as photo manipulation. The graphics chip isn't powerful enough to play the



GENERAL-PURPOSE NOTEBOOK Intel Core 2 Duo T5450, 2GB RAM, 200GB disk, Nvidia GeForce 8400M GS graphics, DVD+/-RW +/-DL, 15.4in widescreen LCD, 2.6kg  
PART CODE NP-R70A007/SUK  
DETAILS [www.samsung.com/uk](http://www.samsung.com/uk)  
FULL REVIEW Mar 2008



latest games, but it doesn't share system memory like integrated graphics chips. It lasted nearly four hours in our battery test, and is excellent value at this price.



## ROCK Pegasus 680

★★★

£1,199 inc VAT  
From [www.rockdirect.com](http://www.rockdirect.com)

EXCLUSIVE



Like Dell's XPS M1530, reviewed opposite, Rock's Pegasus 680 is a 15.4in laptop that aims to take care of all your entertainment needs. You may be baulking at the price, but the 680 is equipped with one of the latest Core 2 Duo processors, a 1,680x1,050 widescreen LCD and Windows SideShow.

SideShow is a small secondary LCD screen embedded into the laptop's lid. In conjunction with navigation controls, it lets you access information when the laptop is switched off, such as emails, appointments, wireless networks in range and battery power. You can listen to music stored on the 160GB hard disk, play a game of solitaire, or download one of the free SideShow gadgets from <http://gallery.live.com>.

The Core 2 Duo T8300 processor is based on Intel's newest 45nm design and is seriously quick. The laptop's overall benchmark score of 199 is marginally faster than AMD's quad-core Phenom (reviewed on page 50), so even demanding applications such as video editors should run quickly. Rock has also thoughtfully used a 2GB RAM module, leaving a spare slot for adding more memory in future.

Our test model came with an HD DVD-ROM drive, but you can specify a read-only Blu-ray drive when ordering. Pricing of this option is still being finalised but Rock expects it to be similar to the HD DVD-ROM drive.

Vista Home Premium's Media Center is perfect for most entertainment needs and, unlike most laptops, the Pegasus has an integrated hybrid TV tuner. This means you can choose between analogue or Freeview broadcasts

and pause, rewind or record shows. The mini aerial isn't much good for watching TV on the move, though, and Rock doesn't provide a remote control like Dell does.

Rock has chosen the same graphics card as Dell, but with 512MB of dedicated memory. It didn't help in Call of Duty 2, where the 680 managed only 20fps. Unless you're happy to reduce quality settings, don't think about gaming at the screen's 1,680x1,050 resolution.

HD movies look great at this resolution, but the weedy battery won't last long enough to watch a whole film on the move. Under light use, it lasted only one hour and 31 minutes. It's good to see a wide range of ports (there are four USB ports and an HDMI output) plus useful components such as a webcam, Draft-N and Bluetooth.

Build quality isn't up to Dell's standard, but we like the insurance-backed three-year warranty. If you think SideShow is a gimmick, Rock offers an identical Pegasus without it for £70 less. Even then, the 680 is expensive. If it's speed you're after, PC Nextday's 4-6640, reviewed in Labs on page 72, is even faster but costs just £769 including VAT.

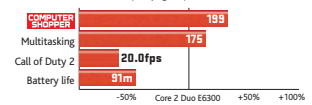
Jim Martin

### SUMMARY

- ✓ Good performance
- ✓ High-resolution screen
- ✗ Expensive; poor battery life

**GENERAL-PURPOSE LAPTOP** Intel Core 2 Duo T8300, 2GB RAM, 160GB disk, Nvidia GeForce 8600M GT graphics, HD DVD-ROM/DVD +/-R +/-DL, 15.4in widescreen LCD, Windows Vista Home Premium, three-year collect-and-return warranty, 3.1kg  
PART CODE P680-T8300-CS  
DETAILS [www.rockdirect.co.uk](http://www.rockdirect.co.uk)

### PERFORMANCE (see page 58)



## ASUS Eee PC 701

★★★★★

£223 inc VAT  
From [www.kikatek.com](http://www.kikatek.com)



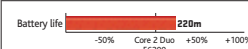
Asus's Eee PC 701 laptop weighs less than one kilogram, yet costs little more than £200. There's no optical drive, but an external model can be plugged into one of the three USB ports. The battery lasted nearly three and a half hours in our tests, which is long enough for most short-haul flights.

The 7in display has a resolution of 800x480 pixels. The keyboard is very small for those with large fingers. The touch pad is accurate, but the buttons lack feedback.

The Eee PC is quite tough and has a solid-state 4GB disk, which won't be damaged by being knocked. However, 2.3GB is occupied by the operating system, so you may want to add SD memory cards for extra



**ULTRA-PORTABLE LAPTOP PC** 900MHz Intel Celeron M ULV, 512MB RAM, 4GB solid-state hard disk, 7in widescreen LCD, 0.92kg  
PART CODE Eee PC 4G  
DETAILS <http://eeepc.asus.com>  
FULL REVIEW Feb 2008



storage. Linux is preinstalled instead of Windows but it isn't difficult to use, and several useful programs such as OpenOffice are installed.

The Eee PC is perfect for anyone who wants a slender laptop while spending as little as possible.

## BYTE SIZE

### BRENTHAVEN ProLite I

★★★

£70 inc VAT  
From [www.allmacshop.co.uk](http://www.allmacshop.co.uk)

The ProLite I is a shoulder bag for carrying laptops with 13.3in screens or smaller. Its black design isn't very exciting, but it feels tough and well made. The handles and zips feel particularly sturdy. However, there isn't much padding in the computer compartment or a Velcro strap to hold smaller laptops in.

There are lots of pockets for holding cables and accessories, plus compartments for files and books, but it isn't roomy enough to be an overnight bag. It isn't comfortable to carry, either. The padding on the shoulder strap isn't very thick, and it's not adjustable. It's also expensive.

Alan Lu

DETAILS [www.brenthaven.co.uk](http://www.brenthaven.co.uk)

### APC Mobile Power Pack

★★★★★

£35 inc VAT  
From [www.redstore.com](http://www.redstore.com)

If you own several devices that charge via USB, this is an essential accessory. This 10Whr li-ion battery is 14x100x65mm and weighs 105g.

Connect the USB charging cable that came with your MP3 player, phone, portable gaming device or smartphone to the Power Pack's USB port, and it will recharge it. Your device must draw no more than 8W to charge. White LEDs light up to show how much charge remains. It takes 3½ hours to fully charge the pack.

Expect to get an additional 50 hours of playing time from a flash MP3 player and around 10 extra hours from an iPod video player or mobile phone.

The Power Pack is ideal for replacing all your chargers when you're travelling.

Jim Martin

DETAILS [www.apc.com](http://www.apc.com)

## BYTE SIZE

### ATEN 2-Port USB+DVI KVM Switch

★★★★★

£51 inc VAT  
From [www.yoyotech.co.uk](http://www.yoyotech.co.uk)

This switch lets you share a DVI monitor, a USB keyboard and mouse, a microphone and a set of 2.1 speakers between two PCs. The cables allow the PCs to be 0.6m apart, and the peripherals 1.2m away.

A wired remote switch lets you swap control to the other PC instantly, which allows you to keep the bulk of the cabling under the desk. You can also switch control to the other PC but retain the audio from the current one. The unit scans the DVI input and switches if only one input is live. No power adaptor is needed, and the DVI interface supports resolutions up to 1,920x1,200.

This isn't the cheapest KVM, but if you need DVI and USB connections it saves on buying two sets of peripherals.

*Jim Martin*

DETAILS [www.aten.com](http://www.aten.com)

### SONY ICD-UX80

★★★★★

£96 inc VAT  
From [www.kikatek.com](http://www.kikatek.com)

This stereo voice recorder and MP3 player has a microphone on each side, so can record a conversation without one voice drowning out the other.

Files and options are shown in a list on the display, and you navigate them using the joystick. Recordings are named according to date and time. The recorder supports MP3 ID3 tags, so displays artist and song name information, but it can't sort music by artist or album, so files have to be organised into folders. Files recorded at the highest-quality setting sounded superb, and you can fit 145 hours of audio on the player's 2GB memory.

This is an excellent voice recorder, and it is fair value.

*Chris Fynamore*

DETAILS [www.sony.co.uk](http://www.sony.co.uk)

## CYBERPOWER Gamer Ultra 950

★★★★★

£750 inc VAT  
From [www.cyberpowersystem.co.uk](http://www.cyberpowersystem.co.uk)

Most of the award-winning PCs we've seen recently have been equipped with an Intel Core 2 Duo processor. This isn't surprising given their impressive performance and low prices. CyberPower's Gamer Ultra 950 is the first PC we've seen that is equipped with one of AMD's new quad-core Phenom processors, which is reviewed in depth in *What's New* on page 50.

The Phenom 9500 processor and 2GB of RAM performed well in our benchmarks, especially in our video-encoding test, which is designed to take advantage of a multicore processor. However, it fell behind the similarly priced Mesh G92 Pulse Pro (see 'Also consider...' on page 24) and its E6850 Core 2 Duo processor in our other tests.

The Gamer Ultra is well equipped for gaming. It comes with one of ATI's latest graphics cards, the Radeon HD 3870. This sped through our demanding 3D tests, so it should have no trouble playing the latest games at moderate resolutions.

CrossFire support means you can add a second ATI graphics card for a performance boost, although if you install a double-slot card such as another HD 3870, it will block off one of the two empty PCI slots. This could be inconvenient if you also want to add peripherals such as a wireless adaptor or TV tuner.

Unlike other PCs at this price, CyberPower's Gamer Ultra doesn't come with any speakers, but it does have a Creative X-Fi sound card, which is much more useful than the cheap speakers usually included with similarly priced



computers. The X-Fi can produce more realistic audio effects in games that support its EAX processing.

The 22in widescreen LCD has only a VGA interface. This is an odd choice, since the graphics card has only DVI ports and you may have to tweak the monitor's settings to get the best-looking image. Image quality is acceptable for everyday use, though. Movies looked bright, and the non-glossy finish means it won't reflect light from fluorescent tubes or sunlight, so causing distracting glare.

We were impressed with the Gamer Ultra's low price, which is cheap for a quad-core PC. However, few games support quad-core processors. The money would have been better spent on a faster graphics card. Mesh's G92 Pulse Pro is even faster in games and was quicker in our multiple applications and image-editing tests, too. It doesn't have a dual-core processor so isn't as quick in video-encoding tasks and doesn't have a dedicated sound card, but the G92 is still the better buy.

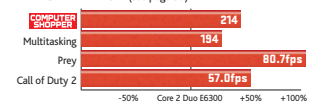
*Alan Lu*

#### SUMMARY

- ✓ Good performance
- ✓ X-Fi sound card
- ✗ Most games don't use four cores

DESKTOP PC AMD Phenom 9500, 2GB RAM, 320GB hard disk, ATI Radeon HD 3870, DVD+/-RW +/-DL, 22in widescreen LCD, Windows Vista Home Premium, three-year collect-and-return warranty  
PART CODE Gamer Ultra 950  
DETAILS [www.cyberpowersystem.co.uk](http://www.cyberpowersystem.co.uk)

#### PERFORMANCE (see page 58)



## Also consider...

### RL SUPPLIES Modula 4300-OC

★★★★★

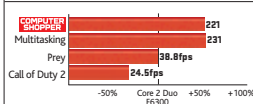
£600 inc VAT  
From [www.rlsupplies.co.uk](http://www.rlsupplies.co.uk)

**BEST BUY** The Modula 4300-OC has a Core 2 Duo E4500 processor that's been overclocked to 3GHz, so it did very well in our benchmarks. It's also capable of playing the latest games, as the results of our demanding 3D tests show, thanks to its 256MB GeForce 8600GTS graphics card. The motherboard is SLI-capable so you can add a second Nvidia card for even better 3D performance in future.

We were pleased with the quality of the Asus VW193S 19in widescreen monitor. It has a resolution of 1,440x900 pixels, which makes working on expansive spreadsheets and panoramic photos easier. It reproduced our greyscale gradient test smoothly



DESKTOP PC Intel Core 2 Duo E4500, 2GB RAM, 320GB hard disk, 256MB Nvidia GeForce 8600GTS, DVD+/-RW +/-DL, 19in widescreen LCD  
PART CODE SYSMOD4300-OC  
DETAILS [www.rlsupplies.co.uk](http://www.rlsupplies.co.uk)  
FULL REVIEW Feb 2008



too. Its backlight was even and colours looked accurate and vibrant.

Windows Vista Home Premium is included as standard, but you can opt for Windows XP Home Edition instead if you have older programs and peripherals that aren't Vista-compatible. The Modula 4300-OC is a well-rounded, good-value PC.



## BYTE SIZE

### MYVU Universal Edition

★★★  
£155 inc VAT  
From [www.egears.co.uk](http://www.egears.co.uk)

This headset lets you watch video in private while on the move. It's compatible with most portable media players, including fifth-generation iPods.

The internal battery should give four hours of video playback. Sadly, image quality is poor. Colours are drab, brightness isn't as high as we'd like and contrast is poor. The display fills a small part of your field of view. The screen built into our iPod appeared just as large when held 30cm away.

It's comfortable, so could prevent neckache caused by looking down at your player for long periods. However, this alone can't justify the price.

**Seth Barton**

DETAILS [www.myvu.com](http://www.myvu.com)

### ZALMAN FG-1000 FPSGun

★★★  
£33 inc VAT  
From [www.specialtech.co.uk](http://www.specialtech.co.uk)

This gaming mouse is shaped like an upside-down gun.

The design places the optical sensor in front of your hand, rather than below it, so smaller movements are needed to gain the same results. It's good for quickly acquiring new targets, but less well-suited for lining up delicate headshots.

It has all the features that gamers would expect, including five programmable buttons, easily adjustable sensitivity to 2,000dpi and plenty of Teflon pads to help it glide smoothly across your desktop.

The change of grip can prove a welcome relief. However, hardened gamers won't appreciate the time required to get proficient with it. It's not a bad design, but there are no great advantages.

**Seth Barton**

DETAILS [www.zalman.com](http://www.zalman.com)

### VERYPC GreenPC Treeton Standard

★★★★  
£545 inc VAT  
From [www.very-pc.co.uk](http://www.very-pc.co.uk)

A media centre PC equipped with a TV tuner ensures you never miss your favourite TV shows, but leaving it on constantly is a burden on your electricity bill and the environment. VeryPC claims its Treeton Standard media centre computer uses only 26W when idle, and 30W on average.

However, in our tests we found that it used 40W when idle and around 65W when churning through our demanding benchmarks. These figures are still lower than a standard £600 PC, which consumed around 80W when idle and roughly 120W during our tests. However, they're nowhere near as low as Apple's Mac mini, which used only 20W when idle and around 50W during our tests. The Mac mini's Core 2 Duo processor is designed for laptops, so it's more power-efficient than the Treeton Standard's dual-core Athlon processor, which was designed for desktop PCs.

The Treeton Standard's Athlon 64 X2 BE-2300 processor and 2GB of RAM performed reasonably well in our benchmarks, although the Mac mini and its Core 2 Duo T7200 processor was faster, despite having only 1GB of RAM. As expected, the integrated Radeon graphics chip wasn't powerful enough for gaming or playing Blu-ray video smoothly, which is a problem if you want to add a high-definition optical drive later. This is a shame, since an HDMI port is already built in.

We were also disappointed by the lack of an S/PDIF port for connecting a surround-sound receiver. The Treeton Standard comes with a PCI tuner, so you can



record Freeview programmes. It's a single tuner so you can't, for example, record one programme while watching another. An inexpensive USB tuner can be added later, though. A more serious limitation is the 120GB hard disk, which is too small if you want to use the Treeton Standard as your main PC and store lots of TV recordings as well.

A larger hard disk can be added, although this PC only has room for a 2½in laptop disk. These are considerably more expensive and less spacious than their desktop counterparts. The disk and the laptop-style DVD writer are mounted in a cage, which can be tricky to remove. The Treeton is compact, but there's little room for upgrades inside the cramped case other than replacing the PCI TV tuner.

Before you decide to buy a Mac mini, bear in mind that Apple's Front Row has no TV capabilities, while Vista's Media Center is better than any Freeview box we've seen. It also has a five-year, return-to-base warranty.

We can't recommend the Treeton, though. Its power usage isn't particularly low for a media centre PC, and it has only one TV tuner and a small hard disk. It doesn't even come with a remote control or keyboard as standard.

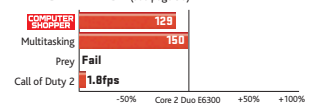
**Alan Lu**

#### SUMMARY

- ✓ Compact and power-efficient
- ✗ Only one TV tuner; small hard disk
- ✗ Ill-suited for Blu-ray playback

MEDIA CENTRE PC AMD Athlon 64 X2 BE-2300, 2GB RAM, 120GB hard disk, ATI Radeon X1200, DVD+/-RW +/-DL, Windows Vista Home Premium, five-year RTB warranty  
PART CODE Treeton Standard  
DETAILS [www.very-pc.co.uk](http://www.very-pc.co.uk)

#### PERFORMANCE (see page 58)



## Also consider...

### MESH G92 Pulse Pro

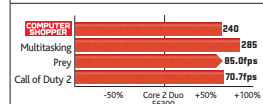
★★★★★ **PRICE CUT!**  
£820 inc VAT  
From [www.meshcomputers.com](http://www.meshcomputers.com)

**BEST BUY** The G92 Pulse Pro is a well-specified PC at a great price. Its 512MB Nvidia GeForce 8800GT graphics card performed very well in our demanding 3D tests. The G92 should be able to play the latest games at high detail settings, including upcoming DirectX 10 titles, for some time to come. The G92 can also be used for more serious work thanks to its fast Core 2 Duo processor and 2GB of RAM. Despite its power, it's a surprisingly quiet computer.

Mesh has substituted the original 22in GNR monitor for a 22in HannsG HI221DP. This is



DESKTOP PC 3GHz Intel Core 2 Duo E6850, 2GB RAM, 500GB hard disk, 512MB Nvidia GeForce 8800GT, DVD+/-RW +/-DL, 22in widescreen LCD  
DETAILS [www.meshcomputers.com](http://www.meshcomputers.com)  
FULL REVIEW Mar 2008



identical except for its higher 1,000:1 contrast ratio. A second Nvidia graphics card can be added in SLI mode to boost 3D performance even further. Usefully, the 8800GT graphics card is a single slot rather than a double slot card, so it doesn't block off any adjacent PCI slots.

## BYTE SIZE

### WESCO

#### Doctor Who Tardis 4-Way USB Hub

★★★★★

£19 inc VAT  
From [www.firebox.com](http://www.firebox.com)

It's not often we see four-port USB hubs in the shape of *Doctor Who*'s iconic Tardis. Sadly, it can't travel through time and it's no bigger on the inside than the outside.



Plugging in a USB device causes the hub to mimic its TV counterpart by flashing its blue light and emitting the klaxon sound, though a switch can silence it. A mains adaptor is included to accommodate power-hungry USB devices.

This is fun, but it's not as good value as Belkin or Trust's seven-port USB hubs, which are £18 from [Amazon.co.uk](http://Amazon.co.uk).

Alan Lu

DETAILS [www.wescolimited.com](http://www.wescolimited.com)

### JAM

#### Panic Button

★★★

£4.97 inc VAT  
From [www.firebox.com](http://www.firebox.com)

Jam's Panic Button is unlike a nuclear detonator or a device for any kind of actual emergency. This is just as well, as you wouldn't want to rely on this rather flimsy plastic construction in a pinch. It comes with software that pops up the JPEG of your choice when you press the button, plus four sample Excel screenshots.



The idea is that you hit the panic button to instantly hide whatever you're getting up to when you're supposed to be working. Unfortunately, its bright red, yellow and black colour scheme is likely to attract the attention of the most inattentive manager, and it failed to disguise both monitors that were connected to our PC. The Stealth Switch (£20 inc VAT, from <http://bigmaggot.co.uk>) is better.

Kat Orphanides

DETAILS [www.bluw.com](http://www.bluw.com)

### CHOOSING A...

## Laptop Computer

Follow the steps to find your ideal specs

**PROCESSOR:** 1.6GHz Pentium Dual-Core T2060  
**MEMORY:** 512MB DDR  
**HARD DISK:** 60GB  
**STORAGE:** DVD rewriter  
**GRAPHICS:** Integrated (shares system memory)  
**SCREEN:** 15.4in widescreen 1,280x800 LCD  
**EXTRAS:** Wireless networking  
**CONNECTORS:** Three USB2, memory card reader  
**SOFTWARE:** Windows Vista Home Premium  
**WEIGHT:** 3kg  
Recommended minimum in grey

**1** The minimum specification of laptop we recommend, shown above in grey, is a good starting point when working out your ideal system. This is an average laptop that should cost around £600. It is not particularly powerful or, at 3kg, particularly portable.

**2** These days, you should only be looking for a dual-core processor, as it is no more expensive than its single-core equivalent. Dual-core processors, such as Intel's Core 2 Duo range, can be much faster at many tough tasks. This is dependent on software support, but a lot of applications have now been optimised.

**3** Most laptops come with 15.4in 1,280x800 widescreen displays, which are great for watching DVDs or TV. If you want a laptop for use around the home, especially for entertainment purposes, it's worth considering one with a larger 17in display. This will also have a higher native resolution of at least 1,440x900, giving you a bigger desktop. This makes it far easier to use complex applications, such as photo- or video-editing software.

**4** A modem, 10/100 Ethernet port and wireless 802.11b/g networking (WiFi) should be fitted as standard, but there are also some other ports and connectors that you might want. FireWire (IEEE 1394) is common and useful for digital video enthusiasts. Bluetooth is handy for connecting to a mobile phone, but it's usually fitted only to more expensive business laptops. Memory card readers are pretty much standard, but check that your camera or MP3 player's format is supported.

**5** If portability is your main priority, look for a laptop

with a 12.1in display. Spending around £1,000 will get you an ultra-portable laptop that weighs under 2kg. Most of these laptops are just as powerful as their larger counterparts, though some use slower, ultra-low voltage (ULV) processors to further increase battery life.

**6** Some ultra-portables can attach to an optional docking station, which incorporates drives, ports and power, when you get home to your desk. It's the best of both worlds, but tends to be expensive. Others have separate DVD drives, or no optical drive at all, to help keep size and weight to a minimum.

**7** If you're not swayed by ultra-portable chic, you can get a lot more for your money. Entertainment laptops pile on the features but still keep the price under £1,200. You should expect a 17in widescreen display, hybrid TV tuner and a remote control.

**8** There are features you can add to a laptop without increasing the weight or reducing battery life. A 120GB or 160GB hard disk will give you much more storage space, while 1GB of RAM will help you speed through tougher tasks. DVD rewriter drives are standard and will allow you to burn CDs and DVDs on your laptop.

**9** Dedicated graphics let you play modern 3D games and are increasingly common on all but the cheapest or lightest laptops. Look for an ATI Mobility Radeon 2600 or Nvidia GeForce 8600M GS chip as a minimum for getting smooth frame rates on the latest titles. Many laptops use integrated graphics, which are fine for all other purposes, but use up system memory.

**10** Once you're happy with your specification, start to shortlist some models you can afford. Check the weight, display size and battery life of each of them. If these are not acceptable, you need to reconsider your priorities and which features you really need.

